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Introduction

Organochlorine pesticides (OCPs) are organic compounds which consist of at least one covalent bonded atom and benzene atom (Wang *et al.*, 2006). OCPs are used for pest controls and have been used for agricultural purposes and aquaculture sectors worldwide (Sun *et al.*, 2005; Zhou *et al.*, 2008). Insecticides, herbicides and nematicides are the most types of pesticides that used recently. The widely used of OCPs chemicals are including dichlorodiphenyltrichloroethane (DDT), chlordane, heptachlor, endrin, dieldrin, benzenehexachloride (BHC), lindane and epoxide. Most of them are hydrophobic and tends to bioaccumulate in organisms. In addition, the exposure to these pesticides may cause the inhibition of enzyme system in heart and destruction of livers which gives rise to leukemia and anemia. OCPs are known as effectiveness against a variety of insects that used in agricultural purposes. The chemicals are harmful and toxic to wild life and humans (Kurt & Ozkoc, 2004). The OCPs can reach the environment from direct application and runoff and some OCPs are volatile which can be adsorbed onto sediments in water and will bioaccumulate in aquatic organisms. These OCPs are divided into three groups which are DDT, cyclodienes and BHC groups.

DDT belongs to a chemical class of diphenyl aliphatic which consists of an aliphatic or straight carbon chain with two phenyl rings attached. DDT is a hydrophobic, colorless solid with weak, chemical odor and nearly insoluble in water but moderately soluble in many organic solvents including natural oils and body lipids. DDT is changed in environment to DDE and DDD. DDE is more stable than DDT in soil conditions (Risebrough *et al.*, 1972). Cyclodienes